AD-A264 504



2

# REAR BATTLE IN THE FUTURE: Is Our Doctrine up to the Task?

A Monograph
by

Major Thomas J. Newman

Quartermaster

DTIC
ELECTE
MAY 19 1993
S D
A




School of Advanced Military Studies
United States Army Command and General Staff College
Fort Leavenworth, Kansas

First Term AY 92-93

Approved for Public Release; Distribution is Unlimited

93-11053



93 5 18 014

# REAR BATTLE IN THE FUTURE:
# Is Our Doctrine up to the Task?

A Monograph
by

Major Thomas J. Newman
Quartermaster




School of Advanced Military Studies
United States Army Command and General Staff College
Fort Leavenworth, Kansas

First Term AY 92-93

Approved for Public Release; Distribution is Unlimited

# REPORT DOCUMENTATION PAGE

Form Approved
OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for information operations and reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.

| 1. AGENCY USE ONLY (Leave blank) | 2. REPORT DATE | 3. REPORT TYPE AND DATES COVERED |
|---|---|---|
| | 25 Jan 1993 | Final 1st Term AY 92-93 |

**4. TITLE AND SUBTITLE**
Rear Battle In The Future: Is Our Doctrine Up To The Task?

**5. FUNDING NUMBERS**

**6. AUTHOR(S)**
Thomas J. Newman, MAJ, QM, USA

**7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)**
U.S. Army Command and General Staff College
School of Advanced Military Studies (SAMS)
Fort Leavenworth, Kansas 66027

**8. PERFORMING ORGANIZATION REPORT NUMBER**

**9. SPONSORING MONITORING AGENCY NAME(S) AND ADDRESS(ES)**

**10. SPONSORING MONITORING AGENCY REPORT NUMBER**

**11. SUPPLEMENTARY NOTES**

**12a. DISTRIBUTION / AVAILABILITY STATEMENT**
Unlimited

**12b. DISTRIBUTION CODE**

**13. ABSTRACT** (Maximum 200 words)

This monograph analyzes the utility of the U.S. Army's doctrine for rear battle. Concepts and procedures for fighting rear battle were developed when the Army was focused on defeating the Soviet Union in a high-intensity conflict. Whether or not these procedures are useful to an army facing different threats is the question the monograph seeks to answer. The doctrine is first summarized, then analyzed against the threat posed by guerrillas, the most likely rear threat in the future. It is then compared with rear battle solutions developed by the German and American armies during WWII, Korea, and Vietnam. The monograph concludes that the doctrine needs revision due to its overemphasis on a Soviet-style threat, and due to excessive demands it places on service support and military police units to defend the rear.

| 14. SUBJECT TERMS | 15. NUMBER OF PAGES |
|---|---|
| Rear Battle | 54 |
| | 16. PRICE CODE |

| 17. SECURITY CLASSIFICATION OF REPORT | 18. SECURITY CLASSIFICATION OF THIS PAGE | 19. SECURITY CLASSIFICATION OF ABSTRACT | 20. LIMITATION OF ABSTRACT |
|---|---|---|---|
| UNCLASSIFIED | UNCLASSIFIED | UNCLASSIFIED | UL |

SCHOOL OF ADVANCED MILITARY STUDIES

MONOGRAPH APPROVAL

Major Thomas J. Newman

Title of Monograph: Rear Battle In The Future: Is Our Doctrine Up To The Task?

Approved by:

Robert M. Epstein, Ph.D. — Monograph Director

COL James R. McDonough, MS — Director, School of Advanced Military Studies

Philip J. Brookes, Ph.D. — Director, Graduate Degree Program

Accepted this 19th day of December 1992

## ABSTRACT

REAR BATTLE IN THE FUTURE: IS OUR DOCTRINE UP TO THE TASK? by MAJ Thomas J. Newman, USA, 50 pages.

This monograph analyzes the utility of the U.S. Army's doctrine for rear battle. Concepts and procedures for fighting rear battle were developed when the Army was focused on defeating the Soviet Union in a high-intensity conflict. Whether or not these procedures are relevant to an army that faces differing threats is the question the monograph seeks to answer.

Rear battle doctrine is first summarized, and its procedures on self-defense, command and control, and reaction forces are analyzed for their utility against possible future threats. The most likely rear threat are guerrilla forces, and capabilities of these forces are defined. The ability of U.S. Army units to implement the doctrine successfully against this threat is examined given the constraints imposed by training, mission requirements, and equipment limitations. The doctrine is then compared with rear battle solutions developed by both the German and American armies during World War II, the Korean War, and the War in Vietnam.

The monograph concludes that current rear battle doctrine needs revision, due to its concentration on the Soviet threat. Further, its procedures are flawed due to excessive demands placed on rear service and military police units to defend the rear, and for its creation of a dual chain of command in the rear. The development of new basic operational doctrine should serve as a catalyst to revise our doctrine for rear battle.



| Accession For | |
|---|---|
| NTIS CRA&I | ☒ |
| DTIC TAB | ☐ |
| Unannounced | ☐ |
| Justification | |
| By | |
| Distribution/ | |
| Availability Codes | |
| Dist | Avail and/or Special |
| A-1 | |

Table of Contents


| | | Page |
|---|---|---|
| I. | Introduction | 1 |
| II. | Rear Battle Doctrine | 5 |
| III. | Utility of the Doctrine | 10 |
| | Levels of Threat and Response | 11 |
| | The Guerrilla Threat | 15 |
| | Self-Defense Capabilities | 17 |
| | Reaction Forces | 23 |
| | Command and Control | 24 |
| | Comparison - German Rear Battle, World War II. | 27 |
| | Comparison - U.S. Rear Battle - Korea | 31 |
| | Comparison - U.S. Rear Battle - Vietnam | 34 |
| IV. | Conclusion | 37 |
| Endnotes | | 41 |
| Bibliography | | 47 |

# I. INTRODUCTION

United States Army doctrine defines how the Army will operate on the battlefield.[1] Because future battlefield conditions cannot be predicted with accuracy, the Army's philosophical approach to doctrine has been that it be descriptive, rather than prescriptive. Army doctrine should, ideally, describe conditions of battle, provide possible solutions, and yet leave room for its soldiers to devise imaginative and initiative approaches to battlefield problems.

The Army addresses this challenge by creating a cornerstone, how-to-fight doctrine, from which tactics, techniques, and procedures for specific situations are derived. The Army's cornerstone doctrine, Field Manual (FM) 100-5, divides the battle into a deep, close, and rear component. This rear battle component, and its governing doctrine, became a matter of personal interest to me when, as a young company commander, I was forced to grapple with its complexities.

Participating in a large field exercise in the early 1980's, my company was forced to defend a large perimeter against aggressive, ubiquitous "guerrillas". Complicating matters was the fact that we had to respond to a barrage of orders and requirements from both the battalion headquarters, and from a mysterious

organization called a "RAOC". Attempts to execute combat service support missions directed by battalion headquarters often conflicted with RAOC directives to conduct patrols, or to provide reaction forces to other unit locations. Likewise, our efforts to defend the unit with three machine guns and widely scattered soldiers proved pitifully inadequate. The results of the exercise were not encouraging, to say the least.

In a subsequent assignment, other challenges of rear battle were revealed to me. A trip to the National Training Center (NTC) exposed my unit to the full range of Soviet-style threats. Executing doctrine faithfully, we formed a large base cluster in the brigade rear area. It was hit repeatedly by air, artillery, and guerrilla attacks. An air assault was launched against us as well. This was defeated by a brigade combat unit that responded at our call. We managed to hold off the guerrillas, but our losses from the air and artillery were heavy. We violated rear battle doctrine only once. That was when an enemy armored column forced us to scatter - NTC experience has shown that base clusters cannot defend themselves against these forces.

My education on rear battle continued after I arrived at the Command and General Staff College. In exercise after exercise, the phrase "risk will be accepted in the rear" was inserted into operations

plans. Discussion of this point revealed that my peers perceived rear battle doctrine as follows: the rear fight was not considered until an enemy force of battalion size or larger penetrated the front lines. Prior to this event, units in the rear would defend themselves. No consideration of threats posed by other than large forces was ever given.

What is the doctrine that has created this mindset in the army, and baffled me as a company commander? The specific tactics, techniques, and procedures used to fight the rear battle are addressed in FM 90-14, REAR BATTLE. This doctrine was developed in the wake of the Army's publication of the 1982 version of FM 100-5, when the concept of rear battle was first articulated.[2] FM 90-14's writers attempted to develop a doctrine that drew on the lessons of history while at the same time remaining faithful to the parameters established in the cornerstone manual.

The resulting doctrine was controversial from its inception. It was criticized for its basic operational concepts, its classification of threats, the proposed responses to threats, non-applicability to basic principles of war, and its applicability across the spectrum of conflict. The 1982 version of FM 100-5 addressed warfighting across the spectrum of conflict, but it was primarily concerned with the most serious threat the United States Army faced, a full-scale war

with the Soviet Union in central Europe. Consequently, FM 90-14 paid particular attention to the threat posed by Soviet forces operating in the rear. It paid other scenarios little more than lip service.

The Soviet Union and the Warsaw Pact have collapsed, and their demise has removed the threat of general war from Europe. What kind of war, then, will the U.S. face in the future? Numerous sources agree that large scale conventional war is the least likely form of conflict the U.S., or any other power, will engage in.[3] The most probable form of war the U.S. can expect to fight will be some form of conflict that falls under the umbrella term of low-intensity conflict (LIC).[4] The question that must be answered is whether or not current rear battle doctrine adequately addresses the threats faced in low intensity conflicts.

Enemy forces faced in LIC will include everything from single snipers, saboteurs, and terrorists, to groups of guerrillas operating alone or in conjunction with regular forces. These threats will be equipped with weapons that range from primitive to modern. Similar situations have been faced by other armies in recent history: the German Army in Russia, the U.S. Army in Korea and Vietnam, and most recently, the Soviet Army in Afghanistan. Despite FM 90-14's attempt to use history to support its doctrinal solutions, the words "guerrilla" and "partisan" do not

appear in the manual.[5] The doctrine virtually ignores forces of this type in its discussion of rear area defense.

The purpose of this paper is to examine rear battle doctrine in detail, to determine if it is a valid solution to the challenges of the future. Are the specific techniques and procedures mandated in the doctrine realistic when considered against both friendly and threat capabilities? How do these procedures compare with rear battle methods adopted in past wars? Are the criticisms of the doctrine valid? Finally, if the doctrine is flawed, are there better ways to fight the rear battle?

## II. REAR BATTLE DOCTRINE

The writers of FM 90-14 wrote the doctrine with a clear purpose in mind: to protect the rear with as little diversion of effort from the close fight as possible. They took their cue from the cornerstone doctrine, which emphasized that the primary purpose of rear operations during battle was to preserve the commander's freedom of action. Rear operations accomplished this by preventing the enemy from disrupting command and control, logistics operations, fire support, and movement of reserves.[6] True freedom of action resulted when the rear battle, which

in essence was defense against the enemy's deep battle, was fought successfully without the use of combat units. These forces, outnumbered as they were by the Soviet enemy's front-line combat forces, were most profitably employed in the close and deep fights.[7] Rear battle doctrine, then, sought to defend the rear using the forces that habitually operated there.

FM 90-14 implemented this concept by emphasizing unit self-defense, denial of key areas or facilities to the enemy, and reaction to enemy incursions by the rear security force - normally military police units.[8] To facilitate command and control of the numerous units operating in division and corps rear areas, units were told to designate specific individuals as rear battle officers, with responsibility to execute the rear battle mission. These officers were given units that specialized in rear battle operations - Rear Area Operations Centers (RAOC) - to assist them in conducting rear battle operations. Units in the rear were directed to organize themselves into bases and base clusters, and to appoint the senior officer present as the base/base cluster commander, in order to better defend themselves. If the defensive capabilities of the base or base cluster and the supporting rear security force were exceeded, combat forces would be dispatched to the rear to neutralize the threat.[9]

The specific techniques listed in the doctrine were inspired by the principles of Unity of Effort, Economy of Forces, and Responsiveness.[10] Unity of Effort results from all commanders and staffs concentrating their efforts to ensure security in the rear while maintaining continuity of support forward. Economy of Forces results from the successful defense of the rear by rear echelon forces. This prevents the diversion of combat forces from the critical close fight. Responsiveness is key to defeat of enemy operations in the rear, and results from effective command and control, sound base defense procedures, and well-trained rear battle forces. Units conducting rear battle are charged with four tasks: secure support forward, detecting the enemy in the rear, delaying the enemy if immediate defeat is impossible, and destruction once sufficient combat power is present.[11] Ideally, this combat power would come exclusively from units stationed in the rear, and not from units normally committed to the close battle.

At first glance, the doctrine appears sound and reasonable. Given the size of the Soviet armies arrayed opposite the American forces in Europe, it was absolutely necessary that combat forces not be diverted to secondary tasks such as rear security. The establishment of a rear battle chain of command, common unit defense procedures, and designated rear security

forces likewise seems both sensible and necessary. The doctrine was, nonetheless, challenged from many quarters.[12] Criticisms centered on its defensive nature, on the combat tasks it placed on combat support and combat service support units, and on the rear battle chain of command it created. It was also accused of violating the principles of war.[13] How valid is this particular charge?

The Army recognizes nine principles of war in its current doctrine: Objective, Offensive, Mass, Economy of Force, Maneuver, Unity of Command, Security, Surprise, and Simplicity.[14] FM 90-14 lists only three rear battle principles, two of which correspond in name to principles of war (Unity of Effort, and Economy of Force). In its application of the principle of Economy of Force FM 90-14 remains true to the corresponding principle of war, although it has been criticized for going too far in this direction - an over-zealous application of this principle could result in critical installations, facilities, or terrain being left defenseless to an enemy attack.[15] In its application of Unity of Effort, however, the doctrine violates the related principle of war.

The doctrine directs that two chains of command be formed for rear battle, one "technical", the other tactical.[16] The technical chain consists of the unit's normal chain of command. The tactical chain

is formed by the appointed rear battle officers, with the assistance of the RAOCs. The doctrine states that the technical chain will direct the units in the performance of mission tasks, while the tactical chain will position units for purposes of defense. It goes on to say that "these roles must remain separate and defined to ensure the rear battle operations retains unity of command."[17] The manual does not define how two separate chains of command, giving orders to the same units, constitutes unity of command. Clearly, this creation of an additional chain complicates command of the rear battle.

The doctrine also is suspect in its support of the principles of the offensive, maneuver, and surprise. FM 90-14 does not discuss taking the offensive against rear threats. Defensive measures are emphasized in the FM, and these restrict the ability of friendly forces to evade or close with the enemy. The initiative in the rear is surrendered to the enemy; rear reaction forces and combat units respond to rear threats only after the enemy has struck first.

The principle of mass is also violated because the forces tasked with dealing with sizable enemy rear threats are dispersed across the battlefield. Military police are scattered throughout the rear, performing a multitude of missions, while combat forces are positioned in the main battle area. Concession of the

initiative to the enemy makes massing against his attacks very difficult.

The doctrine's apparent failure to adhere to certain principles of war does not automatically invalidate it. The principles are general guides, not dogma. Do the weaknesses identified compromise the ability of the Army to execute this doctrine successfully? Or do other factors mitigate against the accomplishment of rear battle objectives? These objectives include prevention of enemy disruption of command and control, communications, logistics activities, and movements. Other objectives are to find, fix, and destroy enemy incursions into the rear, and to provide area damage control (ADC) after an attack or incident. Attainment of these objectives requires not only an executable doctrine, but also resources. What resources are available in the rear, and do these means match with the tasks the doctrine has set for them? If there are mismatches between tasks and capabilities, then how useful is the doctrine?

## III. UTILITY OF THE DOCTRINE

Doctrine is useful only if it is executable, now or in the near future. Is our rear battle doctrine realistic? That is, would it have worked against the

Soviet rear attack, and will it work against the types of threats the Army is most likely to face in the future?

FM 90-14 defines three levels of threat to the rear. Level I includes saboteurs, terrorists, and activity by agents. Level II consists of reconnaissance, raids, and ambushes conducted by enemy combat units, and diversionary, sabotage, or unconventional warfare operations by unconventional forces. Level III threats are mounted by regular combat forces conducting airborne, airmobile, amphibious, infiltration, or deliberate ground combat operations. In the first case enemy forces operate individually or in very small groups. In the second case the foe ranges in size from *team/squad* to company. Level III threats would generally operate in battalion or greater strength. In addition to these, air strikes, artillery, chemical, and electronic warfare attacks are possible against the rear.[18]

To combat this formidable array, FM 90-14 tasks units that normally operate in the rear to defend themselves against all attacks, and to defeat Level I threats. Military police are tasked to respond to all assaults that exceed base defense capabilities. Their mission is to destroy the foe if possible, or contain it until a tactical combat force arrives that can destroy it. Close air, attack helicopters, and field

artillery support are on call to assist in neutralizing or destroying forces that exceed normal rear defense capabilities. Finally, combat forces are to be committed to the rear to defeat any enemy unit that exceeds rear defense capabilities.[19]

Two flaws exist in FM 90-14's solution to the danger in the rear. The first lies in a subtle message that is sent by the delineation of threat by size. Although the FM does not state this, it is a common perception in the field that threat levels are tied to the response. That is, self-defense in the rear will defeat Level I, the MPs will defeat Level II, and combat forces will only be committed in the rear if a battalion-size force or larger, i.e., Level III, penetrates into the rear. This perception results in plans that assign units missions that are beyond their capabilities.

Levels of threat should be based on the capability of the defense, not on the size of the enemy.[20] What constitutes a Level I threat at one base, for example, may be a Level II menace at another. All Level II threats require that assistance be provided to a base, even if local military police are not immediately available. In this case, should other units respond (the doctrine doesn't say), or should the danger be upgraded to Level III? Additionally, some Level II forces, e.g.,

reconnaissance companies, clearly exceed the combat capabilities of the military police. The threat to the rear must be defined by the response necessary to defeat it, and not by its size.

The second flaw has already been identified, and that is the reactive nature of the solution. The doctrine calls for response forces, and combat forces, to join the fight only after the identified danger exceeds the defensive capabilities of the threatened unit. Clearly, a unit under attack is in dire straits once it is determined that the enemy is too strong to defeat. If this doctrine is implemented against the contemplated Soviet attack, a lot of units in the rear could expect to be overrun or mauled before help could arrive. Also, the natural difficulties of dispatching on-call forces to a fight almost ensure a piecemeal effort. By the time the alert and call for help is sounded, MPs are consolidated and committed, and the tactical combat force (TCF) is organized and moving in the right direction, a capable Soviet threat could easily destroy a base, ambush the MPs, and move on to the next target. Possession of the initiative in this battle will allow the enemy to wreak havoc in the rear.

The above analysis shows that the Soviet rear threat, for which FM 90-14 was specifically written, would be difficult to defeat with the approved doctrinal solution. What about dealing with terrorists

and guerrillas, operating independently, with or without state support, and possibly operating in conjunction with regular force operations?

Such attackers are a far more common threat to an army's rear than the type of threat that the Soviets could mount. History is replete with examples of guerrilla or partisan forces conducting effective operations in the rear of regular armies. Guerrilla and partisan forces are usually indistinguishable from the general population. In some cases, guerrilla forces are inserted into the rear, or are composed of bypassed regular forces. In other cases, this threat can be classified as an insurgency, an organized, armed political struggle against an existing government, usually conducted by racial, religious, linguistic, or other similarly identifiable groups.[21] With the breakup of colonialism and the East-West confrontation, the frequency of guerrilla warfare and insurgency has risen dramatically.[22]

Assuming that future U.S. military operations will take place overseas, the Army may have to deal with disaffected elements of the population taking up arms and attacking American forces. Although these groups will often be poorly equipped and trained, they will still pose a significant danger due to their mobility, ability to hide within the general population, and because they will choose the time and

place to strike. In those unusual cases where the threat is both well-trained and well-armed, such as in Vietnam, the danger to the rear assumes even larger proportions.

Twentieth century military theorists T.E. Lawrence and Mao Tse-Tung have demonstrated, through their writings and their deeds, how effective irregular forces can be.[23] Guerrilla tactical operations, as identified by these theorists and practiced by numerous insurgents worldwide, focus almost exclusively on the rear. Tactical principles of the guerrilla emphasize attacking weakness while avoiding strength, and constantly maintaining the initiative. Rear service units, and the lines of communication these units operate on, are identified as vulnerable and lucrative targets.[24] Unfortunately, current rear battle doctrine not only ignores this type of threat, but actually seems to enhance the effectiveness of traditional guerrilla tactics.

One of the aims of guerrilla attacks, particularly when they operate in support of regular forces, is to immobilize the opponent.[25] Rear battle doctrine helps the guerrilla in achieving this by directing the rear service units to cluster into tight perimeters. This tactic may be effective for defending a perimeter, or denying a key facility to the enemy, but it also degrades a unit's ability to perform its

primary mission. Constructing obstacles, fighting positions, and base cluster defenses, and then manning these defenses, takes a considerable number of man-hours away from units that are already thinly manned. Concentration of friendly units into tight perimeters also leaves the countryside outside of the perimeters to the guerrillas. Finally, the doctrinal provision that leaves combat forces forward until called to crush a battalion or larger sized threat immobilizes the enemy the guerrillas fear most, the trained, combat-ready maneuver unit.

Although U.S. forces will rarely conduct tactical operations against insurgent forces overseas,[26] guerrillas of some type are likely to be faced. Guerrilla forces operating against extended lines of communication can have a significant impact on operational maneuver, sustainment of forces in theater, support of the indigenous population, and the disposition of forces.[27] Our current doctrine for the rear fight does not address the guerrilla menace to the rear. This being the case, are the self-defense capabilities of the rear adequate to defeat the threat posed by guerrilla forces?

The ability of units in the rear to defend themselves and their base or base cluster is key because the doctrine requires all units in the rear to defeat some threats, and defend against and survive

allothers. What exactly do units in the rear have that will allow them to fight and survive against the forces arrayed against them?

The following table shows the strength and armament of some units typically found in the rear. Units such as these will operate from the rear boundary of the theater into the rear of divisions. In addition to the heavy and crew-served weapons listed below, every soldier in these units is equipped with a personal weapon, either an M16 rifle or a 9 mm pistol.

| UNIT | | ARMAMENT | | | MOBILE COMMS |
|---|---|---|---|---|---|
| | Strength | M60 | M2 | M203 | Radios |
| Area Signal Co | 203 | 4 | 0 | 6 | 2 |
| Truck Co (Corps) | 189 | 4 | 5 | 4 | 2 |
| Maint Co, Non-Div | 229 | 6 | 1* | 6 | 2 |
| Supply Co (GS) | 202 | 4 | 1* | 4 | 1 |

* Ground mounts (tripods) not authorized.[28]

The numbers on the chart make it plain that these representative units can not in any way be considered well-armed. The heaviest weapon, the M2 machine gun, is useless against most armored vehicles, and is primarily an air defense weapon. Anti-tank weapons are not authorized, and light anti-tank weapons (LAWs) will be issued to these type units only after the requirements of combat units have been filled. The same is true for other weapons useful in a defense, such as hand grenades and mines.

The problem of self defense is exacerbated by

the size of perimeters these units normally occupy. The general supply company, for example, will normally require six separate working and living areas connected by internal and external road nets, and a minimum space of a one km square area.[29] The area signal company has an even more challenging problem, as its soldiers normally operate in small teams scattered over large areas. Making matters even more difficult is the fact that the number of soldiers inside the perimeter constantly changes due to mission requirements. This problem is especially severe for transportation units. Generally, combat support and combat service support units in the rear must occupy positions that are too large to be defended with the quantities of soldiers and weapons available.

Lack of communications equipment, particularly radios, also weakens the FM 90-14 concept of base defense. Most units in the rear have only enough radios to communicate on their required logistical support nets. FM 90-14 requires bases and base clusters to establish base defense operations centers (i.e., base command posts) with organic assets, and to pass rear battle information over a rear battle command net. Units in the rear are also expected to conduct security patrols in the rear. A glance at the chart shows that radio assets in the rear can not support all of these requirements. With rapid communications being

essential to successful conduct of the rear battle, it appears that the doctrine is seriously undermined by these radio shortages.

Although current arms and communications equipment are probably adequate to defend a perimeter against many guerrilla threats, the average rear unit will have only a limited chance of conducting a successful defense if it is attacked by a trained, well-armed, and highly motivated force such as the Viet Cong. Dispersal of personnel and weapons due to mission requirements will make the self-defense task even more difficult. The chance of success will be even lower if the enemy achieves surprise and attacks when the unit has soldiers dispersed on mission requirements. As stated earlier, achieving surprise is a basic tenant of guerrilla operations, and the reactive nature of the doctrine should allow guerrilla opponents to achieve this.

The final factor bearing on the self-defense concept of rear battle doctrine is the state of training of the soldiers. Very few units that operate in the rear train their soldiers adequately on combat tasks such as the conduct of security patrolling, use of weapons, and battle drills.[30] This lack of combat skills training, when coupled with weapons and communications gear shortages, makes self-defense an extraordinarily difficult task. In short, poorly

trained soldiers operating in dispersed locations will not be able to provide adequate security to critical areas in the rear, and will in fact be terribly vulnerable to enemy attack.

FM 90-14 acknowledges the inability of individual units to conduct a sustained defense against Level II and III threats.[31] Its solution to this situation is the base cluster defense concept. Is this concept a realistic and workable solution in the rear area?

The base cluster defense concept seeks to alleviate some of the unit self-defense problems by grouping units in the rear together for mutual protection. Command and control of the base cluster is assumed by the senior officer present. Clustering is directed by the rear battle command post on the advice of the RAOC. The RAOC's primary criteria for decisions on clustering is security, not mission support or command and control considerations.[32] The base cluster relies for success on tight perimeters, effective command and control, rapid response by internal reaction forces, and external support from military police forces.

Some of the weaknesses of this concept have already been addressed. Few, if any, rear support company or battalion headquarters have the staff, the expertise, or the communications equipment to command

and control much more than their own subordinates. Establishing and defending tight perimeters is difficult for lone units; tying together perimeters between units unfamiliar with each other will be even more difficult. The low priority of support for most rear service units will result in little engineer effort in the rear to construct perimeter defenses, and also very little barrier materiel. The positioning of units using a criteria of security over all other considerations will inevitably reduce the effectiveness of the unit in accomplishing assigned missions.

All of the above problems, challenging as they are, can be worked around. That portion of the base cluster concept, even with its obvious weaknesses, can be made to work at some cost to support of the battle forward. The portion of the concept that doesn't work well is the dependence on military police to defeat or contain threats that exceed the capabilities of the base. The military police face many of the problems other units in the rear face: too many missions, and too few weapons and soldiers.

Military police units perform the missions of battlefield circulation control, area security, prisoner of war control and evacuation, and maintenance of law and order.[33] To accomplish these missions, military police (MP) must often operate in single teams that consist of one vehicle and two soldiers.

Dispersed across the rear area in this way, they can provide some area security, but they cannot rapidly mass their combat power to assist threatened bases. What combat power they do have is not formidable: each team has one M60 machine gun and one Dragon anti-tank missile in addition to their standard personal arms.[34] Obviously, military police units would be outnumbered and outgunned by most Level II and III threats. Worse yet, their mission requirements exceed their rear battle capabilities to the greatest degree in the scenario that promises to provide the greatest threat to the rear. That scenario, of course, is a contingency operation in a guerrilla infested area, where lines of communication are extended.[35]

The base cluster defense concept does not depend entirely on MP reaction teams for assistance against strong threats, even though FM 90-14 specifically names MP forces "the combat link of the rear battlefield."[36] Artillery, engineer, military intelligence, and combat forces all are mentioned as having roles in the rear battle. However, the use of all of these assets is tied to defeat of a Level III threat that exceeds the capabilities of the primary rear battle forces. The FM does not mention use of these forces to defeat guerrillas. Assuming a commander directed use of these forces against the range of contemplated threats, could they be

successfully employed as envisaged by the doctrine?

Use of these assets in a situation where the enemy synchronizes attacks in the front and rear would be a difficult operation to execute. The doctrine's dependence on an escalated, on-call response to defeat Level III threats forces a commander to reorganize for rear combat in the midst of an engagement, thus diverting combat forces from the front at critical times.[37] The response, then, would be the exact opposite solution from the one intended by the doctrine, which seeks to prevent the diversion of combat forces from the close fight.

There are other practical difficulties in using such forces in the rear on an on-call basis. The large numbers of friendly forces in the rear makes use of artillery fires impossible unless the fires are called in by an observer with eyes on the target. Trained artillery forward observers are not normally stationed in the rear, however, and few soldiers in the rear are trained in adjusting artillery fire. Also, artillery is normally positioned well forward, so it will not be able to range most of the rear area unless it displaces rearward. Military intelligence assets, like the artillery, are oriented towards the enemy; turning them around and getting worthwhile collection or jamming support from them will be difficult, and detrimental to the main effort. Committing tactical

combat forces such as armored cavalry regiments or attack helicopter brigades to the rear fight, will also be very difficult in an on-call basis. Such units must have accurate, timely intelligence of both friendly and enemy locations to conduct successful rear attacks, and this information will be hard to gather and disseminate. This is so because Corps military intelligence assets, as already stated, do not normally collect in the rear, and cannot do so without degrading support to the close fight. Sending combat units after poorly defined targets at uncertain locations will disperse combat power, again at cost to the decisive close battle.[38] The concepts for employment of reaction forces in the rear are neither practical for defense of the rear, nor desirable for prosecution of the close fight.

FM 90-14 proposes a solution to the challenge of coordinating these many elements of the rear battle. Is the proposed rear battle command and control structure workable?

The doctrine creates the roles of rear battle officer and base cluster commander. The doctrine intended that these officers, assisted by RAOCs, would bring order and control to a command and control situation in the rear that is confusing at best, and chaotic at worst. While the doctrinal solutions are a step in the right direction, they do not provide a

fully workable result.

The worst feature of the doctrine is its creation of a dual chain of command. The rear battle officer, and possibly the base cluster commanders, do not command the forces under them. Despite this, they are tasked with directing the placement of units and facilities, and of directing rear battle operations. The existing chains of command are virtually ignored as players in rear battle. This arrangement will inevitably produce conflicting orders and conflicting priorities from two chains to the units. The result of this conflict will be confusion, wasted effort, lost productivity, and possible failure in the rear battle.

The RAOC as an entity also has weaknesses that the doctrine has not corrected. As reserve component units, RAOCs typically lack critical equipment, trained personnel, and time to train with the active duty headquarters they support in wartime. They also lack the authority and/or the resources to perform some of the critical tasks that must be accomplished. For example, while the doctrine recognizes the importance of intelligence in successful rear battle, it is vague about who collects it and how critical products are to be disseminated. The RAOC is required to perform Intelligence Preparation of the Battlefield (IPB) for the rear battlefield, but neither it nor anybody else is tasked to provide IPB products to combat forces

earmarked for the rear. IPB of the rear, especially in a guerrilla warfare environment, is heavily dependent on human intelligence sources, but this resource too is not available to the RAOC.[39] Most disturbing of all, however, is the fact that the RAOC is not given tasking authority over the Corps MPs and engineer units - the very units that the rear battle headquarters must control.[40] The RAOC, as it is currently constituted, has neither the expertise nor the authority to assist a commander in fighting an active rear battle.

Base cluster commanders are in a similar situation. Under the doctrine, they are given much responsibility, but little formal authority. Units that operate from a base cluster will continue to take mission orders from their normal chain of command, and such orders are bound to conflict to some degree with orders coming from the rear battle chain of command. The biggest challenge a base cluster commander faces, however, is setting up and operating a base cluster operations center (command post). Personnel and communications equipment are in very short supply in most support unit headquarters, and what is there is focused on accomplishing the unit's mission. Base Defense Liaison Teams (BDLT) from the RAOCs are available to assist only one in three base clusters.[41] The requirement to create an additional operations cell, and then manage the defense of a large

perimeter, is a burden that many units can only perform marginally. The result of this, of course, is that a key command element of the rear battle structure is very weak.

The preceding analysis has attempted to examine rear battle doctrine against a possible future threat. In several key areas, the doctrine has fallen short of achieving the desired solution. This raises the question of why the doctrine is ineffective. Rear battle is not a new phenomonon. It has been waged successfully and unsuccessfully in many wars, so historical guidance on what works and what doesn't work should be available. The American Army fought extensive rear battles in its last two wars, and the German Army battled an enormous threat in their rear in World War II. The history of these wars should provide some evidence to improve our rear area security doctrine.

The German Army, after its initial successes in Russia, soon found itself assailed from the front and the rear. The Soviet Union, despite huge losses, was soon able to mount counterattacks that pushed back and defeated entire German armies. Often these counterattacks were supported by operations in the rear of the German armies. These operations included airdrops, amphibious assaults, deep penetrations by mobile forces, and attacks by partisans. The partisan

threat, however, was the most frequent and enduring threat the Germans faced in their rear.

The Germans had no doctrine for combatting partisans or other rear threats when the war began. Also, due to the size of the Soviet Army, they had no plans to divert combat units from the front to fight in the rear. Their service support soldiers, like the American Army's today, were expected to defend themselves, but were poorly armed and not well-trained for combat actions of any type. As a result, these units fared poorly in their initial contacts with partisans. An entire rail construction company was wiped out by a partisan attack in early 1942 while repairing rail lines behind Army Group Center.[42] A truck company survived a guerrilla ambush only because it was carrying ammunition; its alloted supply was quickly exhausted, and only by breaking open the cargo could the unit hold off the attackers until help arrived.[43] It quickly became apparent that rear service units alone could neither accomplish their missions, nor secure the rear, against the Russian threat.

The Germans swiftly developed a combination of active and passive security measures to defend their rear. Key facilities, such as supply depots, airfields, bridges, and road and rail nets, were guarded and fortified.[44] Units were grouped for

mutual security, and some improvements in weapons and communications capabilities were made in rear units. Entire security divisions were created to patrol and defend designated areas in the rear.[45] Police and local defense forces were integrated into the overall plan of defense. Command and control of rear operations was decentralized, in most cases, to the level of the local strong point or unit commander.[46]

The German solution stressed the need for offensive action in the rear to defeat the threat. Despite their inferiority in numbers, the Germans attempted to maintain the initiative in the rear. Only the most essential facilities were guarded; front-line troops, security troops, locally recruited security forces, and even rear service units all devoted maximum efforts to reconnaissance and attack.[47] Because they were so hard pressed at the front, the Germans improvised solutions that allowed them to press the attack in the rear without using badly needed combat forces. Teams of hunter-killers: jagdkommandos - were formed to track and kill partisan bands in their hideouts.[48] Locally recruited forces, and forces of allies, were used extensively in rear area campaigns. But even with all of these measures, the Germans retained the flexibility and willingness to commit combat forces to rear battle when they deemed the threat severe enough.

One such occasion occurred during the build-up for the German summer offensive of 1943. To protect the flow of troops, supplies, and equipment into attack positions, the LV Corps conducted OPERATION FREISCHUTZ in Army Group Center's rear. This nine day anti-partisan sweep employed one panzer, one infantry, and one security division, as well as an infantry regiment and a Russian security regiment. The Germans eliminated 3,000 partisans, and temporarily secured their lines of communication.[49]

Comparing German methods with FM 90-14, the differences between German and American doctrine are striking. German counter-measures against partisans stressed the following principles: unity of command, offensive action by combined arms, use of armored trains, use of air and artillery, and the importance of intelligence.[50] This approach was consistent with their general philosophy of warfighting, which recognized the primacy of offensive operations. Their experience throughout the war convinced them that "passive defense based on scattered security strong points is not sufficient, no matter how well such a defense may be organized."[51] Self defense, a key component of FM 90-14, seems to have been a minor factor to the Germans, and certainly not a guiding principle.[52] The Germans used whatever chain of command existed in an area to command and control

anti-partisan efforts, instead of attempting to create an additional chain.[53] The major difference, however, is the emphasis on offensive action. By emphasizing the offense, the Germans usually forced the partisans to concentrate on survival and escape, instead of on disruption of the German rear. Thus, while the threat to their rear was always active, it was rarely decisive.[54] They thus achieved a true economy of force: by committing minimum essential forces to stave off defeat in the rear, they were able to mass the bulk of their forces in the area of decision with minimum risk.[55]

In Korea, the United Nations forces were faced with a significant threat in their rear areas, a threat that attempted to operate in concert with forces at the front. This threat included agents, saboteurs, and terrorists, but consisted mainly of North Korean People's Army (NKPA) soldiers. These soldiers turned to guerrilla warfare after they were bypassed and cut off by the Inchon landing and Eighth Army counter-offensive. Their main targets were the extended and vulnerable lines of communication, as well as the rear area soldiers manning these lines.

By October 1950, just as the Eighth Army appeared to be on the verge of complete victory in Korea, its supply lines running from the port of Pusan in southern Korea came under siege. Intelligence

estimates concluded that as many as 40,000 guerrillas were operating in the Army's rear. The rear area service units and South Korean forces were not only unable to keep the LOCs open, but in some cases were unable to defend themselves.

In the wake of the breakout from the Pusan perimeter, Eighth Army directed the IX Corps to mop up bypassed NKPA elements while the rest of the Army advanced into North Korea. This was expected to be a short operation, but the size of the threat dictated otherwise. IX Corps was forced to commit the 25th Infantry Division to anti-guerrilla operations for the entire month of October.[56] This division operated east and south of Taejon, i.e. in the heart of South Korea, while the Korean 11th Infantry Division patrolled west and south of Taejon. The scope of the enemy threat can be determined by the fact that, on 7 October 1950, the 25th ID killed over 400 guerrillas in a single battle, and captured another 500 in another one day battle.[57]

Operating on the eastern side of North Korea, the X Corps also faced attacks in its rear from bypassed North Korean soldiers fighting as guerrillas. The Corps committed elements of the 1st Marine, and later the 3D Infantry Division, to rear area security missions. Despite the Corps' vigilance, the enemy still achieved some success in isolating front line

units from the rear. Convoys could move safely only with strong escorts and air cover, and some units could only be resupplied by air. The threat was such that the combat forces in the rear were in as much danger as the rear service units. On 26-27 October 1950, a Marine battalion guarding a supply dump suffered 70 casualties from a guerrilla attack. [58] A month later, a guerrilla force charged with interdicting the Corps' rail line attacked, in addition to the railroad, an infantry, signal, and artillery battalion in succession. This force inflicted over 100 casualties on the U.S. forces before it withdrew into the hills.[59]

What success the enemy achieved could be attributed to the fact that the guerrillas posessed the initiative. Choosing the time and place of attack, the guerrillas were able to inflict losses on combat units that used passive means to secure the rear.[60] The use of combat forces, although essentially a reaction to enemy pressure, was at least the beginning of offensive action in the rear battle. The results of these operations triggered an attempt to develop doctrine to defeat the NKPA rear threat.

Although I could find no evidence of a formal doctrine for fighting the rear battle emerging during the Korean War, some effort was devoted Army-wide to finding a solution to the problem. In Korea, HQ I

Corps, for example, submitted requests for additional personnel to staff a G3 rear operations section.[61] Similarly, 7th Army in Europe drafted a proposal for rear operations.[62] Actions taken on the ground in Korea included improvements in command and control and unit self-defense procedures, but the main effort was a campaign to attack and eliminate the guerrillas. This campaign used Korean army and police forces, security elements stationed in the rear, and occasionally, combat units. This aggressive policy was extremely effective - U.N. suppressive actions taken throughout 1951 were credited as being the main reason for a significant decline in guerrilla activity by March 1952.[63]

In Vietnam, the U.S. Army faced a situation that essentially eliminated the distinction between front and rear. Enemy guerrillas operated throughout South Vietnam, often coordinating their actions with the actions of regular forces. Although guerrillas attacked all U.S. forces and activities, lines of communication, especially truck convoys, were a favorite target. The enemy sought by these attacks to sever combat units from their sources of support, thus increasing the vulnerability of the total force.

Since U.S. combat forces were fully occupied defending large areas against attack, they were rarely available to assist logistics and other rear service

units in protecting themselves or their convoys. Self protection and base defense thus became guiding principles for rear area security in Vietnam. The 8th Transportation Group, charged with carrying supplies to combat units stationed in the Central Highlands, offers a typical example.

This unit reported that it suffered attacks from ambushes, mines, or harrassing fire virtually daily on its convoys.[64] Responsible for its own security, the Group used organic jeeps and trucks for convoy escort. Jeeps were mounted with radios, machine guns, and M79 grenade launchers, and 2 1/2 ton trucks were converted from cargo carriers to gun trucks. There were two versions of gun truck: one mounting M60 machine guns and grenade launchers, the other carrying a four-barrelled 50-calibre machine gun in the cargo bed. Convoy march units, consisting of 10 vehicles each, were escorted by a "gun jeep" in the front, a "quad 50" gun truck in the middle, and an M60 gun truck in the rear.[65] The soldiers of the unit, moreover, trained extensively on security and anti-ambush procedures. The 8th Group's efforts enabled it to push convoys through guerrilla-infested areas almost daily, and occasionally even at night.[66]

Efforts of this magnitude were obviously costly, both in terms of equipment and efficiency. Large numbers of vehicles, radios, and weapons, as well

as ammunition, were issued to logistics units for self-defense. In 1968, the equivalent of one medium truck company was lost to service in Vietnam because vehicles had been converted to gun trucks for escorting convoys.[67] The lack of security forced many logistics activities, especially transportation units, to cease operations at night. Since transportation units calculate their capabilities on the basis of two shift, 20-hour day operations, this decision cut the productivity of the fleet in half. So, while self-defense was done effectively, the enemy achieved some success in his effort to isolate and immobilize the total force, merely by his presence in the rear.

This short survey of recent history shows that rear battle can be waged effectively. The keys to success in Russia and Korea appeared to be an emphasis on offensive action, which seized the initiative from the guerrillas. A simple chain of command and a realistic assignment of missions that matched with unit capabilities was vital also. In Vietnam, the allocation of sufficient resources, i.e. weapons and training, was key to the self-defense effort. The use of existing chains of command undoubtedly contributed to successful self-defense as well. Although neither the Germans nor the Americans were able to completely eliminate the threats to their rear, the threats were usually contained and often neutralized by aggressive

action.

## IV. CONCLUSION

Current U.S. rear battle doctrine was written to address the challenge posed by the Soviet Union's doctrine for deep attack. In addressing this problem, the doctrine focused on the requirement to protect the rear while minimizing the diversion of forces from the decisive fight in the main battle area. This focus was appropriate, as a stated aim of Soviet deep attack is to draw forces away from the front to areas of secondary importance.

While addressing this demanding issue, however, the doctrine writers overlooked one of the primary functions of doctrine, that it be useful and usable, and applicable to all scenarios. FM 90-14, focused as it is almost entirely on the Soviet threat in Europe, does not meet this requirement. With the demise of the threat that the doctrine sought to defeat, FM 90-14 is even less applicable now. Solely for this reason, this doctrine needs to be rewritten.

Even if the Soviet threat still existed, however, rear battle doctrine deserves careful scrutiny for utility. The paper has highlighted several weaknesses in the doctrine: the over-emphasis on economy of force, the passive, reactive nature of it,

the mismatch between capabilities and missions, and the awkward command structure it creates. All of these problems indicate that this doctrine simply will not work. An inadequate or failed doctrine is worse than no doctrine at all. FM 90-14 should either be rewritten, or rescinded.

The preferred solution is to rewrite the doctrine. Rear battle is a valid concept, but it must have a usable doctrine to be fought successfully. Most of the criticisms of FM 90-14 focus on the same issues, so coming up with an improved product should not be too difficult. A look at the weaknesses of the current doctrine provide the answers required to fix it.

First and foremost, rear battle doctrine must recognize and acknowledge the potential cost of accepting risk in the rear. The tone of the current document suggests that loss in the rear battle carries minimal risk. Every prudent commander knows that this is a fallacy, and takes steps to reduce risk in the rear. Our doctrine should reflect what we already believe.

Next, the doctrine should adopt an offensive tone, in keeping with the tenants of our basic doctrine. Allowing the enemy - even a guerrilla force of limited capability - to choose the time and place of battle, increases our risk of defeat. Aggressive action against guerrillas, irregulars, and insurgents

forces them to concentrate on defense and survival, rather than on attacking U.S. rear activities. An aggressive posture can force the guerrillas into remote areas, which weakens the links the guerrillas forge with the general population, and simultaneously protects the force. Offensive action need not be restricted to combat forces. Limited actions can be conducted by combat support and service support units given some additional weapons and communications capabilities. U.S. Special Forces are trained and equipped to raise and lead irregular forces. Combining these units with local forces to battle guerrillas in the rear is a viable option, and one that has worked extremely well in the past.[68]

The doctrine must take a realistic view of unit capabilities, and assign missions accordingly. Currently, self defense requirements exceed the capabilities of most rear service units. If initiatives to improve the armament and communications capabilities of CS and CSS units are not implemented, then the doctrine should reduce the requirements placed on units in the rear.[69]

Finally, the dual command structure should be abolished in favor of requiring existing chains of command to assume rear battle missions. The senior commander in the rear, the Corps Support Command Commander, should command the rear battle through the

existing chain of command. RAOCs should augment this chain of command, not replace it. This solution was in fact proposed in the initial concept for rear battle.[70] It needs to be resurrected.

Existing rear battle doctrine does not meet the needs of the Army of today, or the Army of the foreseeable future. The current rewrite of the Army's cornerstone doctrine, FM 100-5, justifies a revamping of FM 90-14. Now is the time to scrap obsolete doctrine and develop a blueprint for battle in the rear.

## END NOTES

1 U.S. Army, Field Manual 100-5, Operations (Preliminary Draft), (Ft. Leavenworth, KS, 1992), p. 1-1.

2 U.S. Army, FM 100-5, Operations (Final Draft), (Washington, D.C., January 1982), p. 1-5.

3 U.S. Army, FM 100-5, Operations (Washington, D.C., 1986), p. 2; Martin van Creveld, The Transformation of War (New York, 1991), p. 197; John D. Waghelstein, "Some Thoughts on Operation Desert Storm and Future Wars," Military Review (February 1992), p. 81.

4 U.S. Army, Field Manual 100-20, Military Operations In Low Intensity Conflict (Washington, D.C., 1990), p. 1-1.

5 Glenn M. Harned, "Offensive Rear Battle", Military Review, (February 1986). p. 31.

6 U.S. Army, Field Manual 100-5, Operations, p. 137.

7 Ibid., p. 39.

8 James L. Saunders, Combat Power In The Rear: Balancing Economy Of Force And Risk, (SAMS Monograph, 1987), p. 3.

9 U.S. Army, Field Manual 90-14, Rear Battle, p. 2-3.

10 Ibid.

11 Ibid., pps. 2-4, 2-5.

12 See Ralph C. Marinaro, "Rear Operations Doctrine - a Re-evaluation," Military Police Professional Bulletin, (Spring 1987); Paul D. Hughes, "Battle In The Rear: Lessons From Korea," (SAMS Monograph, 1988); Center For Army Lessons Learned, Bulletin 2-86: Focus On Rear Operations, (Ft Leavenworth, November 1986); and James L. Saunders, "Combat Power In The Rear: Balancing Economy Of Force And Risk," (SAMS Monograph, 1987).

13 Thomas A. Hopper, The Principles of War and

END NOTES

Rear Area Protection: Have We Achieved Economy of Force?, (AOSF Monograph, Ft Leavenworth, KS, 1988), p. 3.

14 U.S. Army, Field Manual 100-5, Operations, Appendix A.

15 James L. Saunders, Rear Operations: Protecting The Points Of Decision, (SAMS Monograph, Ft Leavenworth, KS, 1987), p. 35.

16 U.S. Army, Field Manual 90-14, Rear Battle, pps. 3-2, 3-3.

17 Ibid., pps. 3-23 and 3-24.

18 Ibid., pps. 1-2 to 1-7.

19 Ibid., p. 4-4.

20 U.S. Army, AirLand Battle Study, Vol I (Annex E: Rear Operations), (Ft Monroe, VA, 1986), p. E-8.

21 U.S. Army, Field Manual 100-20, Military Operations In Low Intensity Conflict, p. 2-7.

22 Martin van Creveld, The Transformation of War, (New York, 1991), p. 22.

23 See T. E. Lawrence, Seven Pillars of Wisdom, (Middlesex, England, 1962), especially Chap. 23, pps. 193 - 202; and Mao Tse-Tung, Selected Military Writings of Mao Tse-Tung (Ft. Leavenworth, KS, 1991), especially "Problems of Strategy in China's Revolutionary War, pps. 77 - 152.

24 Otto Heilbrunn, Partisan Warfare, (New York, 1962), pps. 78 - 83.

25 Ibid., p. 64.

26 U.S. Army, Field Manual 100-20, Military Operations In Low Intensity Conflict, p. 2-24.

27 See Henning von Sandrart, "Considerations Of The Battle In Depth", Military Review, (October 1987),

p. 13; and Otto Heilbrunn, Partisan Warfare,pps. 166 - 167.

28 U.S. Army, TOEs 11-117L0 (Area Signal Co); 55-018J4 (Truck Co, Corps); 29-137H2 (Maint Co); 29-118H1 (General Supply Co).

29 U.S. Army, Field Manual 42-418, General Supply Company, General Support, (Washington, D.C., 1986), fig. 4-2, p. 4-12.

30 U.S. Army, AirLand Battle Study, Vol I (Annex E: Rear Operations). On page E-4-65 of this document, the U.S. Army Transportation School calls for the addition of "Fight As Infantry" as an additional mission statement for transportation units, based on AirLand Battle rear defense requirements. This addition to the mission statement is necessary "to provide justification for changes in training and equipment capabilities, . . . something which must occur if transportation units are to survive on the AirLand Battlefield." My own twelve years of experience in logistics units confirms this observation. Priorities in log units are to providing support. The availability of time, ammunition, and training areas for combat training is minimal. Consequently, CSS units are not normally well-prepared for combat.

31 U.S. Army, Field Manual 90-14, Rear Battle, p. 4-2.

32 Ibid., pps. 3-17, 3-18.

33 U.S. Army, Field Manual 19-1, Military Police Support For The AirLand Battle, (Washington, D.C., 1988).

34 Ibid.

35 Glenn M. Harned, "Offensive Rear Battle", Military Review, (February 1986), p. 32.

36 U.S. Army, Field Manual 90-14, Rear Battle, p. 3-1.

37 James L. Saunders, Rear Operations: Protecting The Points Of Decision, (SAMS Monograph, Ft

Leavenworth, KS, 1987), p. 43.

38 Saint, Crosbie E., and Yates, Walter H., "Attack Helicopter Operations In The AirLand Battle: Rear Operations", Military Review, (October 1988), p. 5.

39 U.S. Army, AirLand Battle Study, (Annex E, Rear Operations), p. E-11.

40 Ibid., p. E-10.

41 U.S. Army, Field Manual 90-14 Rear Battle, p. 3-12.

42 Center For Military History, Rear Area Security In Russia: The Soviet Second Front Behind The German Lines, (Washington, D.C., 1984), p. 20.

43 Ibid., p. 13 - 14.

44 Ibid., p. 7.

45 Ibid., p. 5.

46 Ibid., p. 35.

47 Otto Heilbrunn, Partisan Warfare, p. 65.

48 Otto Heilbrunn, Partisan Warfare, pps. 102 - 103.

49 Bernard Fall, Street Without Joy, (New York: 1967), p. 172.

50 The War Office, Notes From Theatres Of War No. 21: Partisans, (London, 1945), pps. 10-11.

51 Center For Military History, Rear Area Security In Russia: The Soviet Second Front Behind The German Lines, p. 35.

52 James L. Saunders, Combat Power In The Rear: Balancing Economy Of Force And Risk, p. 21.

53 Center For Army Lessons Learned, Bulletin # 2-86: Focus On Rear Operations, p. 7.

## END NOTES

54 Although guerrilla and partisan forces were usually ineffective in their attempts to impede German operations, they did achieve some notable successes. See, for example, Center for Military History, Pub 104-16, Rear Area Security In Russia, (Washington, D.C.: 1984), p. 30, for a description of partisan actions in the isolation and subsequent destruction of Army Group Center during OPERATION BAGRATIAN, June 1944. Or see The War Office, Notes From Theatres Of War No. 21: Partisans, (London: 1945), p. 9, which describes the success of French maquis in delaying the movement of German reserves to the Normandy beachhead.

55 James L. Saunders, Combat Power In The Rear: Balancing Economy Of Force And Risk, p. 24.

56 Paul D. Hughes, Battle For The Rear: Lessons From Korea, (SAMS Monograph: Ft Leavenworth, 1988), p. 14.

57 Roy E. Appleman, U.S. Army in the Korean War: South to the Naktong, North to the Yalu, (Washington, D.C., 1986), p. 721

58 Ibid., p. 723.

59 Ibid., p. 724.

60 Combat Studies Institute, Battlebook 1-A: Rear Area Operations, Rear Area Security, 1st Marine Division, 21 Oct - 13 Nov 1950, (Ft. Leavenworth, 1984).

61 HQ I Corps, EUSA, Rear Area Defense, (Policy Letter and Personnel Justification), 6 June 1951.

62 7th Army Provost Marshal, Letter to Provost Marshal General, Washington, D.C., Subject: Rear Area Security, 4 November 1952.

63 U.S. Army, Guerrilla Operations of the North Korean People's Army During the Korean Conflict, (Washington, D.C., 1951), p. .

64 W.N. Redling, MG, Letter, U.S. Army Transportation School, Subject: Transportation Developments: 8th Transportation Group Armed and

## END NOTES

Armored Against Ambush, (Ft. Eustis, VA, 1968), p. 1.

[65] Ibid., p. 3.

[66] Ibid., p. 2.

[67] Joseph M. Heiser, Logistic Support - Vietnam Studies, (Washington, D.C., 1991), p. 162.

[68] Otto Heilbrunn, Partisan Warfare, pps. 120 - 121.

[69] Ordnance Magazine, Fighting The Rear Battle: Self-Protection On The AirLand Battlefield, (Ordnance Professional Journal, February 1988), p. 9. This article discusses the CSS Self-Protection Initiative, a program that proposed increases in the quantities of weapons and radios to CSS units. This initiative resulted directly from the publication of FM 90-14, and the perceived inadequacy of CSS units to defend themselves in accordance with the new doctrine.

[70] U.S. Army, Field Manual 100-5 (Final Draft), p. 13-4.

# BIBLIOGRAPHY

## Books


Appleman, Roy E. U.S. Army in the Korean War: South to the Naktong, North to the Yalu. Washington, D.C.: Center for Military History, 1986.

Dallin, Alexander. Soviet Partisan Movement In The North Caucasus, 1942 - 1943. Maxwell Air Force Base, AL: Air Research And Development Command, 1954.

Fall, Bernard. Street Without Joy. New York, NY: Shocken Books, 1967.

Heilbrunn, Otto. Partisan Warfare. New York, NY: Frederick A. Praeger, 1962.

Lawrence, T. E. Seven Pillars of Wisdom. Harmondsworth, Middlesex, England: Penguin Books, 1962.

Mao Tse-Tung. Selected Military Writings of Mao Tse-Tung. Fort Leavenworth, KS: USACGSC, Combat Studies Institute, 1991.

Simpkin, Richard E. Race To The Swift: Thoughts on Twenty-First Century Warfare. McLean, VA: Pergamon-Brassey's International Defense Publishers, 1985.

Van Creveld, Martin. The Transformation of War. New York, NY: The Free Press, 1991.


## Manuals


Field Manual 19-1, Military Police Support For The AirLand Battle. Washington, D.C.: HQ, Department of the Army, 23 May 1988.

Field Manual 31-85, Rear Area Protection Operations. Washington, D.C.: HQ, Department of the Army, 17 July 1970.

Field Manual 42-418, General Supply Company, General Support. Washington, D.C.: HQ, Department of the Army, 16 October 1986.

Field Manual 63-20, Forward Support Battalion. Washington, D.C.: HQ, Department of the Army, 26 February 1990.

Field Manual 90-14, Rear Battle. Washington, D.C.: HQ, Department of the Army, 10 June 1985.

Field Manual 100-5, Operations (Final Draft). Washington, D.C.: HQ, Department of the Army, 15 January 1982.

Field Manual 100-5, Operations. Washington, D.C.: HQ, Department of the Army, 5 May 1986.

Field Manual 100-5, Operations (Preliminary Draft). Washington, D.C.: HQ, Department of the Army, 21 August 1992.

Field Manual 100-20, Military Operations in Low Intensity Conflict. Washington, D.C.: HQ, Department of the Army, 5 December 1990.

Field Manual 100-37, Terrorism Counteraction. Washington, D.C.: HQ, Department of the Army, 24 July 1987.

Summary of Technical Manual (TM __): Motor Transport Convoy Operations in a Guerrilla Environment. (Contracted by USMC). Alexandria, VA: Unified Industries, Inc, April 1975.

TOE (Table of Organization and Equipment) 11-117L0, Area Signal Company, Corps. Washington, D.C.: HQ, Department of the Army.

TOE (Table of Organization and Equipment) 29-118H1, General Supply Company. Washington, D.C.: HQ, Department of the Army.

TOE (Table of Organization and Equipment) 29-137H2, Maintenance Company, Corps. Washington, D.C.: HQ, Department of the Army.

TOE (Table of Organization and Equipment) 55-018J4, Truck Company, Medium, Corps. Washington, D.C.: HQ, Department of the Army.

HQ, Training and Doctrine (TRADOC) Pamphlet 525-5, AirLand Operations. Ft Monroe, VA: HQ, Department of the Army, 11 August 1991.

Articles and Papers

Castle, James M. The Flying Column: A Concept For Tactical Non-Linear Sustainment. SAMS Monograph: USACGSC, Ft Leavenworth, KS: 28 January 1991.

Center For Army Lessons Learned. Bulletin 2-86: Focus on Rear Operations. Ft Leavenworth, KS, November 1986.

Center For Military History Pub 104-16. Rear Area Security In Russia. Center For Military History, Washington, D.C.: Facsimile Edition, 1984, 1988.

Combat Studies Institute. Battlebook 1-A: Rear Area Operations, Rear Area Security, 1st Marine Division, 21 Oct - 13 Nov 1950. Combat Studies Institute, Ft Leavenworth, KS: May 1984.

Dempsey, T. A. Employment of Irregular Forces in Support of Conventional Campaigns. SAMS Monograph: USACGSC, Ft Leavenworth, KS, May 1989.

Department of the Army. Guerrilla Operations of the North Korean People's Army During the Korean Conflict. HQ, Department of the Army, November 1951.

Donnelly, Christopher N. Operations In The Enemy Rear - Soviet Doctrine And Tactics. International Defense Review, pps. 35-41, January 1980.

Goodwin, Michael N. Update: Evolution of Rear Operations Doctrine. Military Police Journal, January 1988.

Harned, Glenn M. Offensive Rear Battle. Military Review, pps. 30-35. USACGSC, Ft Leavenworth, KS, February 1986.

Heiser, Joseph M. Logistic Support - Vietnam Studies. Department of the Army Monograph, Washington, D.C., 1991.

Heredia, Michael D. After The Covering Force Fight, Then What? The Role of the Armored Cavalry Regiment in the Corps Defensive Rear Battle. SAMS Monograph, USACGSC, Ft Leavenworth, KS, 9 March 1988.

Hooper, Thomas A. The Principles of War and Rear Area Protection: Have We Achieved Economy of Force? AOSF Monograph, USACGSC, Ft Leavenworth, KS, 17 January 1988.

Hughes, Paul D. Battle In The Rear: Lessons From Korea. SAMS Monograph, USACGSC, Ft Leavenworth, KS, 15 January 1988.

Konrad, Rudolf Peter. Mountain Warfare No. 11. Chief of Military History, Washington, D.C., 24 February 1950.

1st Logistical Command. Operational Report on Lessons Learned, 1 Jan - 30 April 1966. 1st Logistical Command, USARV, 2 June 1966.

Marinaro, Ralph C. Rear Operations Doctrine: A Re-Evaluation. Military Police Professional Bulletin, Spring/Fall 1987.

Moore, Timmy D. Rear Operations During the Offense: How Capable Is the Corps of Conducting Rear Security Operations During the Attack? SAMS Monograph, USACGSC, Ft Leavenworth, KS, 27 Nov 89.

Moores, Lawrence W. T.E. Lawrence: Theorist and Campaign Planner. SAMS Monograph, USACGSC, Ft Leavenworth, KS, May 1992.

Ordnance Magazine. Fighting The Rear Battle: Self Protection On the AirLand Battlefield. Ordnance Magazine, February 1988, pps. 2-9.

Saint, Crosbie E., and Yates, Walter H. Attack Helicopter Operations In the AirLand Battle: Rear Operations. Military Review, USACGSC, Ft Leavenworth, KS, pps. 2-10, October 1988.

Saunders, James L. Combat Power in the Rear: Balancing Economy of Force and Risk. SAMS Monograph, USACGSC, Ft Leavenworth, KS, 2 June 1987.

_____. Rear Operations: Protecting The Points of Decision. SAMS Monograph, USACGSC, Ft Leavenworth, KS, 5 January 1987.

USACGSC Study. Rear Area Security and Area Damage Control in the Communications Zone. USACGSC, Ft Leavenworth, KS, Nov 1960.

U.S. Army Training and Doctrine Command. AirLand Battle Study, Vol I (Annex E: Rear Operations). Ft Monroe, VA, 9 October 1986.

Von Sandrart, Hans Henning. Considerations of the Battle In Depth. Military Review, USACGSC, Ft Leavenworth, KS, October 1987, pps. 8-15.

Vought, Donald B. Force Protection: The Stepchild of Military Operations. Military Review, USACGSC, Ft Leavenworth, KS, May 1992, pps. 87 - 91.

Waghelstein, John D. Some Thoughts on Operation Desert Storm and Future Wars. Military Review, USACGSC, Ft Leavenworth, KS, February 1992, pps. 80 - 83.

The War Office (UK). Notes From Theatres of War, No. 21: Partisans. Chief of the Imperial General Staff, London, June 1945.

Wilson, Ronald W. Corps Combat Aviation Brigade in the Rear Battle: A Future Scenario. MMAS Thesis, USACGSC, Ft Leavenworth, KS, 24 May 1985.

## LETTERS

Headquarters, I Corps, Eighth U.S. Army (Korea), Subject: Rear Area Defense (6 June 1951).

Headquarters, U.S. Army Transportation School (Ft. Eustis, VA), Subject: Transportation Developments, (15 March 1968).

Provost Marshal, 7th Army (Europe), Subject: Rear Area Security. (4 November 1952).